

Wildlife Bureau Survey Note

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2010-11 Small Game Harvest Results

A random survey of licensed hunters was conducted following the 2010 small game season to determine the size and distribution of Iowa's small game harvest (Figure 1). Survey questionnaires were mailed to 8,278 license holders. Survey participants were asked which species they hunted, how many days they hunted, and how many of each species they harvested. Survey participants returned 3,422 usable questionnaires for a response rate of 41%. Based on these returns Iowa had 208,401 licensed hunters in 2010-11 and of these 75,827 indicated they hunted small game (Table 2). This is a 15% decrease in small game hunters compared to the year before.

By residency, the number of resident small game hunters decreased 12%, from 75,150 in 2009 to 66,500 in 2010 while the number nonresident small game hunters fell 34% from 14,077 in 2009 to 9,327 in 2010. Pheasant were the most commonly reported species hunted by small game hunters (79%), while cottontails were the second most sought after species with 29% of small game hunters indicating they hunted rabbits (Table 1).

Hunters from 41 different states visited Iowa last fall to pursue small game. Over 56% of Iowa's nonresident small game hunters came from 5 states, Minnesota, Wisconsin, Michigan, Illinois and Missouri, in that order. The typical small game hunter reported hunting 8.0 days last fall.

Ring-necked Pheasant. - An estimated 60,058 pheasant hunters (29% of licensed hunters, 79% of small game hunters) took to Iowa's fields last fall and harvested 238,208 roosters (Table 1 & 2). The number of pheasant hunters declined -19%, while total harvest declined -12% compared to 2009 estimates (Table 3). Roadside counts showed populations were down 30% compared to 2009, so the decline in hunters and harvest was expected. An estimated 8,800 nonresident hunters contributed to Iowa's total estimate of pheasant hunters. Iowa's peak year for nonresident pheasant hunters was 1997 with 50,349. Resident hunter numbers declined -16% while the number of nonresident pheasant hunters declined -34%. This year estimate of 60,058 pheasant hunters (71% below the historic average) sets a new all time low for pheasant hunter numbers in Iowa.

Resident hunters hunted an average of 6.8 days last fall and harvested 4 birds during the season. Nonresident pheasant hunters averaged 4.7 days afield and harvested 5 birds for the season (Table 3). Hunter success (harvest/day) was highest through the first 2 weekends of the season (Table 4). Approximately 39% of the total pheasant harvest occurred in the first 9 days of the 2010 season (Table 4). Sixty-six percent of pheasant hunters reported hunting 5 days or less. Resident hunters accounted for 83% of the total pheasant harvest. In addition to the regular pheasant season, an estimated 1,281 adults took 3,363 youth pheasant hunters (under the age of 16) hunting during Iowa's special 2-day youth pheasant season. These young hunters harvested an estimated 1,880 roosters (Table 2).

This year's harvest estimate is the lowest ever recorded for Iowa. The harvest estimate was -61% below the 10-year average, and -80% below the historical average harvest of 1.2 million roosters. This marks the fourth time Iowa's total pheasant harvest has fallen under 500,000 roosters (2001, 08, 09, 10). Four consecutive winters with statewide snowfall of 30 inches or

Bobwhite Quail. - Approximately 10,604 quail hunters (5% of licensed hunters, 14% of small game hunters) harvested 11,620 quail during the 2010 quail season (Table 1 & 2). Hunter numbers increased 4% and harvest declined -4% compared to 2009 estimates. This is another new all time low quail harvest for Iowa. Quail hunters averaged 6 days a field and harvested 1 bird for the season (Table 3). Thirty percent of the quail harvest occurred in the first 9 days of the 2009 season (Table 4). Fifty-nine percent of quail hunters hunted 5 days or less. Resident quail hunters accounted for 82% of the total quail harvest. Roadside counts showed quail numbers had declined 70% over 2009 estimates, caused by the severe winter of 2009-10 (snowfall 111% above normal) across Iowa's southern quail range, thus the decline in hunter harvest was expected.

Species	Eligible Hunters	Small Game Hunters
Pheasants	28.8%	79.2%
Quail	5.1%	14.0%
Cottontail	10.6%	29.0%
Squirrels	11.3%	30.9%
Partridge	0.6%	1.6%
Jackrabbit	0.3%	0.7%

2010-2011 Iowa Small Game Hunter Survey

Please report only YOUR SMALL GAME hunting IN IOWA. If you did not hunt small game in Iowa, please answer "No" to the first question and return this card.

Did you hunt SMALL GAME in IOWA during 2010-11? ☐ Yes ☐ No

Total number of days hunted in IOWA (for small game only):

Please report season totals AND period totals for pheasants and quail :

NOTE: the period totals must add up to equal the season total.

Wild Pheasants (not game farm)					Wild Quail (not game farm)				
SEASON TOTAL	Oct 30 to Nov 8	Nov 9-30	Dec 1 to Jan 10		SEASON TOTAL	Oct 30 to Nov 8	Nov 9-30	Dec 1 to Jan 10	Jan 11-31
Number YOU Harvested	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Number of Days Hunted	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Please report season totals for each species below:

	Cottontail Rabbit	Squirrel	Hungarian Partridge	Jack- rabbit
Number YOU Harvested	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Number of Days Hunted	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Did you hunt during the 2010 Youth Pheasant Season? ☐ Yes ☐ No

If YES, how many youths hunted with you and how many pheasants were harvested?

Wild Pheasants Harvested

Machine-scanned form, please print neatly using blue or black ballpoint pen only.

Table 2. Estimated small game hunters, harvest, effort by species and license type for the 2010-11 small game season.

License/Species	Hunters		Harvest		Days	
	estimate	95% CI	estimate	95% CI	estimate	95% CI
ALL LICENSE TYPES						
Pheasant	60,058	± 4,946	238,208	± 48,281	388,596	± 52,223
Quail	10,604	± 2,493	11,620	± 5,436	61,353	± 18,976
Cottontail Rabbit	22,005	± 3,521	74,044	± 19,811	113,597	± 25,644
Squirrel	23,440	± 3,682	119,590	± 29,181	127,999	± 36,580
Hungarian Partridge	1,229	± 717	1,057	± 1,068	9,895	± 7,050
Jackrabbit	541	± 501	0	± 0	3,568	± 3,620
			Total Days		603,175	± 84,290
RESIDENT HUNTERS						
Pheasant	51,258	± 4,823	197,266	± 46,342	347,067	± 50,782
Quail	9,150	± 2,380	9,572	± 5,158	53,969	± 18,447
Cottontail Rabbit	21,183	± 3,482	71,780	± 19,684	110,204	± 25,560
Squirrel	22,862	± 3,648	117,360	± 29,073	125,707	± 36,521
Hungarian Partridge	1,085	± 708	1,005	± 1,065	8,871	± 6,978
Jackrabbit	505	± 498	0	± 0	3,522	± 3,620
			Total Days		558,420	± 83,415
NONRESIDENT HUNTERS						
Pheasant	8,800	± 1,097	40,942	± 13,548	41,529	± 12,183
Quail	1,454	± 743	2,048	± 1,717	7,384	± 4,448
Cottontail Rabbit	822	± 523	2,264	± 2,242	3,393	± 2,068
Squirrel	578	± 504	2,230	± 2,510	2,292	± 2,069
Hungarian Partridge	144	± 114	52	± 71	1,024	± 1,004
Jackrabbit	36	± 51	0	± 0	46	± 57
			Total Days		44,755	± 12,108

Estimated number of people who hunted at least 1 of the 6 small game species listed:

75,827 ± 5,281

Estimated number of people who hunted upland game birds only (pheasant, quail, partridge) :

43,360 ± 4,324

Estimated number of people who hunted small game mammals only :

15,067 ± 3,021

Youth Pheasant Season

1,281 ± 734 Adult Hunters
 3,363 ± 2,752 Youths Hunted
 1,880 ± 1,744 Harvest

Table 3. Estimated number of small game hunters, harvest, and days hunted, by license type, species, and year, in Iowa during the 2009-10 and 2010-11 small game seasons.

SPECIES	LICENSE TYPE								
	ALL LICENSE TYPES			RESIDENT			NONRESIDENT		
	2009	2010	%CHG	2009	2010	%CHG	2009	2010	%CHG
Ring-necked pheasant									
Hunters	74,017	60,058	-19%	60,708	51,258	-16%	13,309	8,800	-34%
Harvest	271,126	238,208	-12%	217,816	197,266	-9%	53,310	40,942	-23%
Days	483,552	388,596	-20%	423,511	347,067	-18%	60,041	41,529	-31%
Harvest/hunter	3.7	4.0	8%	3.6	3.9	7%	4.0	4.7	16%
Days/hunter	6.5	6.5	-1%	7.0	6.8	-3%	4.5	4.7	5%
Harvest/day	0.6	0.6	9%	0.5	0.6	12%	0.9	1.0	11%
Bobwhite quail									
Hunters	10,179	10,604	4%	8,237	9,150	11%	1,942	1,454	-25%
Harvest	12,136	11,620	-4%	11,098	9,572	-14%	1,038	2,048	97%
Days	69,874	61,353	-12%	59,202	53,969	-9%	10,672	7,384	-31%
Harvest/hunter	1.2	1.1	-8%	1.4	1.1	-22%	0.5	1.4	166%
Days/hunter	6.9	5.8	-16%	7.2	5.9	-18%	5.5	5.1	-8%
Harvest/day	0.2	0.2	12%	0.2	0.2	-5%	0.1	0.3	180%
Cottontail rabbit									
Hunters	25,840	22,005	-15%	24,647	21,183	-14%	1,193	822	-31%
Harvest	127,663	74,044	-42%	118,220	71,780	-39%	9,443	2,264	-76%
Days	137,337	113,597	-17%	124,956	110,204	-12%	12,381	3,393	-73%
Harvest/hunter	4.9	3.4	-32%	4.8	3.4	-29%	7.9	2.8	-65%
Days/hunter	5.3	5.2	-3%	5.1	5.2	3%	10.4	4.1	-60%
Harvest/day	0.9	0.7	-30%	1.0	0.7	-32%	0.8	0.7	-12%
Squirrel									
Hunters	24,586	23,440	-5%	23,401	22,862	-2%	1,185	578	-51%
Harvest	169,041	119,590	-29%	161,087	117,360	-27%	7,954	2,230	-72%
Days	139,791	127,999	-8%	136,787	125,707	-8%	3,004	2,292	-24%
Harvest/hunter	6.9	5.1	-26%	6.9	5.1	-25%	6.7	3.9	-42%
Days/hunter	5.7	5.5	-4%	5.9	5.5	-6%	2.5	4.0	56%
Harvest/day	1.2	0.9	-23%	1.2	0.9	-21%	2.7	1.0	-63%
Hungarian partridge									
Hunters	3,705	1,229	-67%	3,304	1,085	-67%	401	144	-64%
Harvest	4,643	1,057	-77%	3,904	1,005	-74%	739	52	-93%
Days	25,113	9,895	-61%	23,125	8,871	-62%	1,988	1,024	-48%
Harvest/hunter	1.3	0.9	-31%	1.2	0.9	-21%	1.8	0.4	-80%
Days/hunter	6.8	8.1	19%	7.0	8.2	17%	5.0	7.1	43%
Harvest/day	0.2	0.1	-39%	0.2	0.1	-35%	0.4	0.1	-86%
White-tailed jackrabbit									
Hunters	1,894	541	-71%	1,840	505	-73%	54	36	-33%
Harvest	608	0	-100%	608	0	-100%	0	0	0%
Days	8,721	3,568	-59%	8,559	3,522	-59%	162	46	-72%
Harvest/hunter	0.3	0.0	-100%	0.3	0.0	-100%	0.0	0.0	0%
Days/hunter	4.6	6.6	43%	4.7	7.0	50%	3.0	1.3	-57%
Harvest/day	0.1	0.0	-100%	0.1	0.0	-100%	0.0	0.0	0%

Table 4. Mean hunting effort and harvest by time period for pheasant and quail hunters during the 2010-11 small game season.

SPECIES	Mean days	Mean harvest	Harvest/day	Proportion of effort (days)	Proportion of the harvest
Ring-necked pheasants (N=758)					
Oct. 31- Nov. 8	2.06	1.43	0.70	32%	39%
Nov. 9- Nov. 30	2.63	1.46	0.55	41%	40%
Dec. 1- Jan. 10	1.68	0.79	0.47	26%	22%
Jan. 11- Jan 31	-	-	-	-	-
Bobwhite quail (N=105)					
Oct. 31- Nov. 8	2.26	0.32	0.14	30%	30%
Nov. 9- Nov. 30	2.89	0.31	0.11	38%	28%
Dec. 1- Jan. 10	1.80	0.31	0.17	24%	29%
Jan. 11- Jan 31	0.61	0.13	0.22	8%	12%

Table 5. Harvest and proportion of harvest by August roadside survey region for the 2010-11 small game season^a.

REGION	Ring-necked Pheasant		Bobwhite Quail		Cottontail Rabbit		Squirrel		Hungarian Partridge	
	N	%	N	%	N	%	N	%	N	%
NW	65,709	27.6%	0	0.0%	2,447	3.3%	4,179	3.5%	52	4.9%
NC	29,091	12.2%	0	0.0%	8,751	11.8%	4,482	3.7%	27	2.6%
NE	8,845	3.7%	242	2.1%	6,524	8.8%	26,897	22.5%	846	80.0%
WC	14,377	6.0%	650	5.6%	4,982	6.7%	4,367	3.7%	26	2.5%
C	28,544	12.0%	2,142	18.4%	15,679	21.2%	19,759	16.5%	0	0.0%
EC	21,277	8.9%	0	0.0%	12,361	16.7%	22,049	18.4%	54	5.1%
SW	10,445	4.4%	1,536	13.2%	4,387	5.9%	1,761	1.5%	0	0.0%
SC	7,831	3.3%	1,374	11.8%	8,096	10.9%	12,751	10.7%	0	0.0%
SE	11,147	4.7%	3,628	31.2%	8,553	11.6%	21,008	17.6%	0	0.0%
Nonresident	40,942	17.2%	2,048	17.6%	2,264	3.1%	2,337	2.0%	52	4.9%
Total	238,208		11,620		74,044		119,590		1,057	

^a County of residence is used to assign location, which may not be where a person hunted.